



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,867	08/30/2000	Suzanne P. Hassell	061607-1390	2151

24504 7590 11/20/2006

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
100 GALLERIA PARKWAY, NW  
STE 1750  
ATLANTA, GA 30339-5948

EXAMINER

VU, THONG H

ART UNIT PAPER NUMBER

2142

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/650,867

Applicant(s)

HASSELL ET AL.

Examiner

Thong H. Vu

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-11, 16, 18, 62-64, 66-77, 79 and 82-112 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-11, 16, 18, 62-64, 66-77, 79, 82-112 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

Art Unit: 2142

1. Claims 3-11,16,18, 62-64,66-77,79,82-112 are pending.
2. Claims 6, 12-15,17, 19-36, 37-53, 54-61, 65, 78, 80, 81 are Cancelled.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/06 has been entered.

***Claim Rejections - 35 USC § 112***

4. Claims 3-11,16,18, 62-64,66-77,79,82-112 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

i.e.: The first , second and third channel are not defined in specification.

Examiner interprets the first channel connected to the first device, the second channel connected to second device and the third channel connected to the third device.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 2142

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3-11,16,18, 62-64,66-77,87-111 are rejected under 35 U.S.C. 102(e) as being anticipated by Rekhter et al [6,339,595 B1].

5. As per claim 63, Rekhter discloses A computer-implemented method, implemented in a troubleshooting portal device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18], for providing connectivity between a first communication device and a second communication device, the second communication device residing in an access provider (i.e.: firewall) communication network [Rekhter, the Service provider and firewall, col 18 lines 39-57], the method comprising the steps of:

receiving a specification from the first communication device over a first communication channel, wherein the first communication device is located in a first network operated by a first provider (i.e.: service provider) [Rekhter, service provider, col 2 lines 36-53], the specification comprising at least one predefined identifier (i.e.: IP address) of the second communication device [Rekhter, IP address, col 7 lines 23-49; edge router or IGP,EGP,BGP with Forward information base (FIB), Tag Information base (TIB), col 8 line 55, col 10 line 40];

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device, wherein the second communication device is located in a second network operated by a second provider different than the first provider [Rekhter, PE1 and PE2, Fig 1];

identifying a statically configured second communication channel to the second communication device that is associated with the predefined identifier [Rekhter, configured with appropriate static routes, col 30 lines 30-40; ATM and VPI/VCI, col 22 lines 18-31];

configuring a network device to establish a route between the first communication device and the second communication device using the identified statically configured second communication channel [Rekhter, configured with appropriate static routes, col 30 lines 30-40];

receiving at least troubleshooting data and a test from the first communication device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18];  
and

communicating the received troubleshooting data and the test to the second communication device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18].

6. As per claim 3, Rekhter discloses the step of configuring at least one switch such that a plurality of physical links associated with a plurality of data link connection identifiers (DCLIs) are coupled together as inherent feature of ATM.

7. As per claim 4, Rekhter discloses the step of configuring a digital subscriber loop access multiplexer (DSLAM) connected to a plurality of second communication devices

Art Unit: 2142

such that said second communication device associated with said specified identifier is connected by said step of establishing connectivity as inherent feature of ATM.

8. As per claim 5, Rekhter discloses the step of configuring the network device to route data over a plurality of physical links associated with said predefined identifier as inherent feature of ATM.

9. As per claim 7, Rekhter discloses said first communication device is located in a network service provider communication system [Rekhter, the Service provider consisting of P-routers, col 2 lines 55-65].

10. As per claim 8, Rekhter discloses said first communication device is located in said access provider communication system [Rekhter, the Service provider consisting of P-routers, col 2 lines 55-65].

11. As per claim 9, Rekhter discloses the step of associating a predefined circuit identifier (ID) with said second communication device [Rekhter, ATM and VPI/VCI, col 22 lines 18-31].

12. As per claim 10 Rekhter discloses the step of assigning a first internet protocol (IP) address, wherein said first IP address corresponds to said second communication device [Rekhter, IP address, col 7 lines 23-49].

13. As per claim 11 Rekhter discloses the step of associating a second IP address with said first IP address [Rekhter, source and destination address, col 7 lines 23-49; IP address, col 7 lines 23-49].

14. As per claim 16 Rekhter discloses including verifying a right to access and the steps of specifying and establishing are implemented only after the right to access is verified [Rekhter, authorized to export, col 27 lines 34-46].

15. As per claim 18 Rekhter discloses including monitoring activity between said first communications device and said second communications device, and further including terminating connectivity after a predefined period of no activity [Rekhter, Time to Live, col 37 lines 26-55].

16. As per claim 62, Rekhter discloses the step of assigning the first IP address is performed by the access provider [Rekhter, assigned an IP address, col 15 lines 20-25].

17. As per claim 64, Rekhter discloses the predefined identifier is an IP address and the predefined communication channel is a VC as inherent feature of ATM.

Art Unit: 2142

18. As per claim 66 Rekhter discloses the first provider is a network service provider and the second provider is an access network provider [Rekhter, the service provider and firewall, col 18 lines 39-57; authentication server, col 20 line 58].

19. As per claim 67, Rekhter discloses the method is performed by a device located in the second network operated by the access network provider [Rekhter, the service provider and firewall, col 18 lines 39-57].

20. As per claim 68, Rekhter discloses the step of configuring a DSLAM to couple the first communication channel to the second communication channel as inherent feature of ATM.

21. As per claim 69, Rekhter discloses the predefined identifier is a circuit ID [Rekhter, ATM and VPI/VC], col 22 lines 18-31], and the circuit ID is associated with an IP address previously assigned to the second communication device [Rekhter, assigned an IP address, col 15 lines 20-25].

22. As per claim 70, Rekhter discloses at the network service provider, assigning a permanent IP address to the second communication device [Rekhter, IP TTL field to be the value of IPv4 or IPv6 whichever is applicable, col 37 lines 55-7]; and associating the circuit ID with the assigned IP address [Rekhter, assigned an IP address, col 15 lines 20-25].



23. As per claim 71, Rekhter discloses at a network service provider, assigning a temporary IP address to the second communication device, the IP address selected from a pool of available addresses [Rekhter, IP TTL field to be the value of IPv4 or IPv6 whichever is applicable, col 37 lines 55-7]; and associating the circuit ID with the assigned IP address [Rekhter, assigned an IP address, col 15 lines 20-25].

24. As per claim 72 Rekhter discloses the step of verifying the request before the configuring step [Rekhter, filtering, col 27 lines 34-62].

25. As per claim 73 Rekhter discloses monitoring activity between the first communications device and the second communications device; and terminating connectivity between the first communications device and the second communications device after a predefined period of no activity [Rekhter, Time to Live, col 37 lines 26-55].

26. As per claim 74, Rekhter discloses a portion of the access provider communication network is a frame relay network [Rekhter, frame relay, col 1 line 59].

27. As per claim 75, Rekhter discloses a portion of the access provider communication network is an asynchronous transfer mode (ATM) network [Rekhter, ATM, col 1 line 59].

28. As per claim 76, Rekhter discloses a portion of the access provider communication network is an internet protocol (IP) network [Rekhter, IP address, col 7 lines 23-49].

29. As per claim 77, Rekhter discloses a portion of the access provider communication network is a multi protocol label switching (MPLS) network [Rekhter, MPLS, col 34 line 60].

30. As per claim 87 Rekhter discloses A computer-implemented method, implemented by a troubleshooting portal, for providing connectivity between a first communication device and a second communication device, the method comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device [Rekhter, IP address, col 7 lines 23-49; edge router or IGP,EGP,BGP with Forward information base (FIB), Tag Information base (TIB), col 8 line 55, col 10 line 40];

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device [Rekhter, request to establish PE1, col 16 lines 12-27];

identifying a predefined second communication channel to the second

Art Unit: 2142

communication device that is associated with the predefined identifier [Rekhter, PE1 connected to CE, CE1 and P1, Fig 1; IP address, col 7 lines 23-49];

instructing a network device to couple the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device using the predefined second communication channel, the first communication device located in a first network operated by a first provider, and the second communication device located in a second network operated by a second provider different than the first provider, [Rekhter, edge router or IGP,EGP,BGP with Forward information base (FIB), Tag Information base (TIB), col 8 line 55, col 10 line 40; configured with appropriate static routes, col 30 lines 30-40]

receiving at least troubleshooting data and a test from the first communication device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18]; and

communicating the received troubleshooting data and the test to the second communication device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18].

31. Claims 88-104 contain the identical limitations set forth in claims 3-11,16,18, 62,64,66-77. Therefore claims 88-104 are rejected for the same rationale set forth in claims 3-11,16,18, 62,64,66-77.

Art Unit: 2142

32. As per claim 105 Rekhter discloses A computer-readable medium having a program, implemented by a troubleshooting portal, for providing connectivity between a first communication device and a second communication device, the program comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device, the first communication device located in a first network operated by a first provider and the second communication device located in a second network operated by a second provider different than the first provider [Rekhter, IP address, col 7 lines 23-49; edge router or IGP,EGP,BGP with Forward information base (FIB), Tag Information base (TIB), col 8 line 55, col 10 line 40];

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device [Rekhter, request to establish PE1, col 16 lines 12-27];

identifying a statically configured second communication channel to the second communication device that is associated with the predefined identifier [Rekhter, PE1 connected to CE, CE1 and P1, Fig 1; IP address, col 7 lines 23-49];

coupling the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device [Rekhter, PE1 connected to CE, CE1 and P1, Fig 1];

receiving at least troubleshooting data and a test from the first communication

Art Unit: 2142

device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18];  
and

communicating the received troubleshooting data and the test to the second  
communication device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42  
line 10-18].

33. Claims 106-111 contain the identical limitations set forth in claims 3-11,16,18,  
62,64,66-77. Therefore claims 106-111 are rejected for the same rationale set forth in  
claims 3-11,16,18, 62,64,66-77.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 79,82-86 and 112 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over Rekhter et al [6,339,595 B1] in view of Burke et al [Burke 6,996,067  
B1].

34. As per claim 112, Rekhter discloses A computer-implemented method,  
implemented by a troubleshooting portal, (for providing connectivity between a  
troubleshooting manager device and a managed communication device), the method  
comprising the steps of:

creating, upon user request, a statically configured predefined first channel between the managed communication device and an access unit within an access provider network [Rekhter, configured with appropriate static routes, col 30 lines 30-40; firewall, col 18 lines 39-57];

receiving, over a second channel, an identifier of the managed communication device from the troubleshooting manager device [Rekhter, IP address, col 7 lines 23-49];

receiving, from the troubleshooting manager device, a request to establish connectivity between the troubleshooting manager device and the identified managed communication device [Rekhter, request to establish PE1, col 16 lines 12-27];

instructing a network device to couple the statically configured predefined channel to the second channel, producing a third Channel [Rekhter, PE1 connected to CE, CE1 and P1, Fig 1];

receiving at least troubleshooting data and a test from the troubleshooting manager device [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18]; and

communicating the received troubleshooting data and the test to the managed communication device over the third channel [Rekhter, troubleshoot, col 4 lines 25-33; test the data link, col 42 line 10-18].

Rekhter discloses the troubleshooting process. However Rekhter does not explicitly detail a troubleshooting manager device.

In the same endeavor, Burke discloses a test server or troubleshooting manager device using DLSAM connected to the service provides via ATM network [Burke, Fig 6]

Therefore it would be obvious to an ordinary skill in the art at the time the invention was made to incorporate the troubleshooting manager device as taught by Burke into the Rekhter's apparatus in order to utilize the troubleshooting process.

Doing so would improve performance and reporting to the network management, security, training users and setting policies [Burke, col 9 lines 3-12].

35. Claims 79-86 contain the identical limitations set forth in claims 3-11,16,18, 62,64,66-77. Therefore claims 79-86 are rejected for the same rationale set forth in claims 3-11,16,18, 62,64,66-77.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong H. Vu whose telephone number is 571-272-3904. The examiner can normally be reached on 6:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Thong Vu**  
**Primary Examiner**  
**Art Unit 2142**



THONG VU  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100